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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/765,696 01/19/01 SEM

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HM12/0731

EXAMINER

GARCIA, M

ART UNIT

PAPER NUMBER

1627

DATE MAILED:

07/31/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

# Office Action Summary

Application No.  
**09/765,696**

Applicant(s)

Sem

Examiner  
**Maurie E. Garcia, Ph. D.**

Art Unit  
**1627**



-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ONE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1) ☒ Responsive to communication(s) filed on May 8, 2001

2a) ☐ This action is FINAL.

2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

## Disposition of Claims

4) ☒ Claim(s) 1-14 is/are pending in the application.

4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☒ Claims 1-14 are subject to restriction and/or election requirements.

## Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some\* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

15) ☐ Notice of References Cited (PTO-892)

18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

19) ☐ Notice of Informal Patent Application (PTO-152)

17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_

20) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The instant application is a divisional of 09/083,537. The Preliminary Communication filed May 3, 2001 (Paper No. 2) is acknowledged. Claims 1-14 are pending.
2. Applicant notes that in the previous Restriction Requirements, claims 1-14 were divided into two groups (Group I: claims 1-8 and Group II: claims 9-14) and elects Group II, with traverse.
3. However, as in the parent case, an election of species is also required. Thus, for completeness, the full Restriction Requirement, with election of species, is set forth below. Please note paragraphs 17-18 at the end of the action that deal with applicant's traversal.

#### ***Election/Restriction***

4. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-8, drawn to a method for generating a library of bi-ligands, classified in class 435, subclass 7.1.
  - II. Claims 9-14, drawn to a method for identifying a population of bi-ligands, classified in class 435, subclass 4.
5. The inventions are distinct, each from the other because of the following reasons:

6. Groups I and II are different methods. The methods are different because they use different steps and will produce different products. They therefore have different issues regarding patentability and enablement and represent patentably distinct subject matter. In the instant case, the method of generating the library (Group I) generates a “population of bi-ligands comprising a plurality of identical modules attached to variable second ligands”. The process of identifying a population of bi-ligands (Group II) generates a “population of bi-ligands, wherein said bi-ligand comprises said modules and a second ligand linked by said expansion linker”; note there is no requirement for the identical modules and variable second ligands in this group.

7. These inventions have acquired a separate status in the art as shown by their different classification and/or divergent subject matter. The different methods would require different searches in both the patent and non-patent literature databases, and there is no expectation that the searches would be coextensive. Therefore, this does create an undue search burden, and restriction for examination purposes as indicated is proper.

8. This application contains claims directed to patentably distinct species of the claimed invention for **Groups I and II**. Election is required as follows.

9. In Group I: claims 1-8 are generic to a plurality of disclosed patentably distinct species comprising different receptors and cofactors. In Group II: claims 9-14 are generic to a plurality

of disclosed patentably distinct species comprising different receptors and cofactors. Election from the following species is required. Note: applicant must elect *one* species from *each* (one species of receptor and one of cofactor).

Species of receptor

- A. Kinase
- B. Dehydrogenase
- C. Oxidoreductase
- D. GTPase
- E. Carboxyl transferase
- F. Acyl transferase
- G. Decarboxylase
- H. Transaminase
- I. Racemase
- J. Methyl transferase
- K. Formyl transferase
- L.  $\alpha$ -ketodecarboxylase

Species of cofactor

- A. Adenosine triphosphate
- B. Nicotinamide adenine dinucleotide
- C. Nicotinamide adenine dinucleotide phosphate
- D. Thiamine pyrophosphate
- E. Flavin adenine dinucleotide

- F. Flavin mononucleotide
- G. Pyridoxal phosphate
- H. Coenzyme A
- I. Tetrahydrofolate adenosine triphosphate
- J. Guanosine triphosphate
- K. S-adenosyl methionine

The species are distinct, each from the other, because their structures and modes of action are different. They would also differ in their reactivity with each other (certain cofactors and certain enzymes). Moreover, each of the above species can be separately classified. Therefore, the groups have different issues regarding patentability and represent patentably distinct subject matter.

10. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

11. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and ***a listing of all claims readable thereon***, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

12. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the

limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

13. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

14. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143). Because the above restriction/election requirement is complex, a telephone call to applicants to request an oral election was not made. See MPEP § 812.01.

15. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

16. Applicant is also reminded that a 1 - month (not less than 30 days) shortened statutory period will be set for response when a written requirement is made without an action on the merits. This period may be extended under the provisions of 37 CFR 1.136(a). Such action will not be an "action on the merits" for purposes of the second action final program, see MPEP 809.02(a).

***Traversal***

17. Applicant argues in the Preliminary Communication filed May 3, 2001 (page 2) that that there would not be an undue burden of search between the claims of Group I and Group II. This is not found persuasive because, as set forth above (paragraphs 6 & 7), the Groups represent two different methods and these two inventions have acquired a separate status in the art as shown by their different classification and/or divergent subject matter. The different methods of Groups I & II would require different searches in both the patent and non-patent literature databases, and there is no expectation that the searches would be coextensive.


18. Examination on the merits in the instant case will commence upon receipt of a species election responsive to the requirement set forth above.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maurie E. Garcia, Ph.D. whose telephone number is (703) 308-



0065. The examiner can normally be reached on Monday-Thursday from 8:30 to 6:00 and alternate Fridays.

20. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jyothsna Venkat, can be reached on (703) 308-2439. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4242. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

  
DR. JYOTHSNA VENKAT PH.D  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600

Maurie E. Garcia, Ph.D.  
July 27, 2001